

APPENDIX IV

LAND USE/LAND COVER	AREAS IN HUC-10 SUBWATERSHEDS (ACRES)			
	01	02	03	04
Deciduous Forest	144,520	33,385	34,813	32,446
Emergent Herbaceous Wetlands	16	145	50	1
Evergreen Forest	16,527	869	874	2,703
High Intensity: Commercial/Industrial/Transportation	222	869	333	586
High Intensity: Residential	22	394	42	86
Low Intensity: Residential	671	1,394	355	679
Mixed Forest	29,054	4,836	3,581	7,588
Open Water	224	160	138	647
Other Grasses: Urban/Recreational	177	722	125	459
Pasture/Hay	12,445	39,762	26,059	32,361
Row Crops	4,310	23,549	16,739	16,868
Transitional	2,465	242	29	267
Woody Wetlands	1,096	5,464	2,112	131
Quarries/Strip Mines	306		35	
Total	212,054	111,792	85,286	94,822

Table A4-1. Land Use Distribution in Collins River Watershed by HUC-10. Data are from 1992 Multi-Resolution Land Characterization (MRLC) derived by applying a generalized Anderson Level II system to mosaics of Landsat thematic mapper images collected every five years.

HYDROLOGIC SOIL GROUPS	
GROUP A SOILS	have low runoff potential and high infiltration rates even when wet. They consist chiefly of sand and gravel and are well to excessively drained.
GROUP B SOILS	have moderate infiltration rates when wet and consist chiefly of soils that are moderately deep to deep, moderately to well drained, and moderately coarse to coarse textures.
GROUP C SOILS	have low infiltration rates when wet and consist chiefly of soils having a layer that impedes downward movement of water with moderately fine to fine texture.
GROUP D SOILS	have high runoff potential, very low infiltration rates, and consist chiefly of clay soils.

Table A4-2. Hydrologic Soil Groups in Tennessee as Described in WCS.

STATION	HUC-10	AGENCY	NAME	AREA (SQ MILES)	LOW FLOW (CFS)		
					1Q10	7Q10	3Q20
03420200	0513010701	USGS	Collins River	174.0	0.60	1.00	0.50
03421100	0513020702	USGS	Sink Tributary				
03420500	0513020702	USGS	Barren Fork	126.0	36.1	37.1	34.4
03420600	0513020702	USGS	Owen Branch				
03420400	0513020702	USGS	Mud Creek				
03420380	0513020702	USGS	Mud Creek				
03420360	0513020702	USGS	Mud Creek				
02403155	0513020704	USGS	Cotaquilla Creek				
03421200	0513020704	USGS	Charles Creek	31.1	6.0	7.4	5.5
03421000	0513020704	USGS	Collins River	642.0	55.1	58.0	51.7

Table A4-3. Historical Streamflow Data Summary Based on Mean Daily Flows in Collins River Watershed. USGS, United States Geological Survey.

PARAMETER	SUBWATERSHED			
	01	02	03	04
E. coli	A, B	K, L	N, O	Q, R, S
Fecal Coliform	A, B	K, L	N, O	Q, R, S
Fecal Streptococcus	B, I			
Enterococcus	A			S
Total Coliform	B	K, L	N, O	Q, R
Acidity	J			
Alkalinity (Total)	J			
BOD ₅	A, I	M	P	S
Conductivity (Field)	A, B, I, J	K, L, M	N, O, P	Q, R, S
COD (Low)	B	K, L	N, O	Q, R
DO	A, B, I, J	K, L, M	N, O, P	Q, R, S
Flow	J		P	
Hardness (Total)	A, B, I, J	K, L, M	N, O, P	Q, R, S
pH (Field)	A, B, J, I	K, L, M	N, O, P	Q, R, S
Residue (Dissolved)	A, B	K, L	N, O	Q, R
Residue (Settlable)	J			
Residue (Suspended)	A, B, I, J	K, L, M	N, O, P	Q, R, S
Secchi		M		
Temperature	A, B, I, J	K, L, M	N, O, P	Q, R, S
Turbidity				R
Ag	I		P	R
Al	J			
Ammonia N	A, B, I	K, L, M	N, O, P	Q, R, S
As	A, B, J	K, L	N, O	Q, R, S
Ca				
Cd	A, B, I, J	K, L, M	N, O, P	Q, R, S
Cl ⁻				R
CN ⁻				R
Cr (Total)	A, B, I, J	K, L, M	N, O, P	Q, R, S
Cu	A, B, I, J	K, L, M	N, O, P	Q, R, S
Fe	A, B, J	K, L	N, O	Q, R, S
Hg	B, I	K, L, M	N, O, P	Q, R
Mn	A, B, J	K, L	N, O	Q, R, S
N (Total Kjeldahl)	A, B	K, L	N, O	Q, R, S
Ni	A, B, J, I	K, L, M	N, O, P	Q, R, S
NO ₂ +NO ₃	A, B	K, L	N, O	Q, R, S
P (Total)	A, B	K, L	N, O	Q, R, S
Pb	A, B, I, J	K, L, M	N, O, P	Q, R, S
Se	B			
SO ₄	J			S
TOC				R
Zn	A, B, I, J	K, L, M	N, O, P	Q, R, S

Table A4-4a. Water Quality Parameters Monitored in the Collins River Watershed.
Parameter codes are provided in Table A4-4b.

CODE	STATION	ALIAS	AGENCY	LOCATION
A	COLLI028.8WA		TDEC	Collins River @ RM 28.8
B	COLLI049.0		TDEC	Collins River @RM 49.0
C	CARUE002.3GY	CARUENGERCRIS01	TDEC	Caruenger Creek @RM 2.3
D	CARUENGERCRIS02		TDEC	Unnamed Trib to Caruenger Creek
E	CARUENGERCRIS03		TDEC	Unnamed Trib to Caruenger Creek
F	CARUENGERCRIS04		TDEC	Caruenger Creek at RM 1.7
G	03420200		USGS	Collins River near Tarlton
H	ECO68A21		TDEC	Firescald Creek @ RM4.1
I	BARRENFORK004.5		TDEC	Barren Fork @ RM 4.5
J	DRY008.0		TDEC	Dry Creek @ RM 8.0
K	BFORK004.4WA		TDEC	Barren Fork River @ RM 4.4
L	BFORK019.0WA		TDEC	Barren Fork River @ RM 19.0
M	BARRENFORK16.5		TDEC	Barren Fork River @ RM 16.5
N	HICKO000.8WA		TDEC	Hickory Creek @ RM 0.8
O	WFHIC002.3WA		TDEC	West Fork Hickory Creek @ RM 2.3
P	KEEL003.1		TDEC	Keel Creek @ RM 3.1
Q	CHARL001.0WA		TDEC	Charles Creek @ RM 1.0
R	MOUNT001.0WA		TDEC	Mountain Creek @ RM 1.0
S	COLLI013.6WA	CANEYFK08	TDEC	Collins River @ RM 13.6
T	03421000		USGS	Collins River near McMinnville

Table A4-4b. Water Quality Monitoring Stations in the Collins River Watershed. TDEC, Tennessee Department of Environment and Conservation; USGS, United States Geologic Survey; TVA, Tennessee Valley Authority; NPS, National Park Service.

FACILITY NUMBER	FACILITY NAME	SIC	SIC NAME	MADI	WATERBODY	HUC-10
TN0023591	McMinnville STP	4952	Sewerage Systems	Major	Barren Fork @ RM 4.5	0513010702
TN0025372	Viola UD STP	4952	Sewerage Systems	Minor	Barren Fork @ RM 18.1	0513010702
TN0064629	Bridgestone/Firestone	3011	Tires and Inner Tubes	Minor	Unnamed Trib to Crowfoot Branch @ RM 2.9	0513010703

Table A4-5. Active Permitted Point Source Facilities in the Collins River Watershed. SIC, Standard Industrial Classification; MADI, Major Discharge Indicator.

FACILITY NUMBER	PERMITEE	SIC	SIC NAME	WATERBODY	HUC-10
TN0071889	Sequatchie Valley Coal Corp.	1221	Bituminous Coal and Lignite	Dry Creek	0513010701
TN0072192	Sequatchie Valley Coal Corp.	1221	Bituminous Coal and Lignite	Dry Creek	0513010701
TN0066044	TN Consolidated Coal Co.	1221	Bituminous Coal and Lignite		0513010701
TN0063461	Rogers Group	1422	Crushed and Broken Limestone	Collins River	0513010701
TN0063711	Tri-County Stone Company	1422	Crushed and Broken Limestone	Cedar Hollow Cr	0513010703

Table A4-6. Active Permitted Mining Sites in the Collins River Watershed. SIC, Standard Industrial Classification.

FACILITY NUMBER	FACILITY NAME	SECTOR	RECEIVING STREAM	AREA	HUC-10
TNR050120	Meeks Auto Sales	M	Mill Creek	6.0	0513010701
TNR050831	Grundy County Landfill	L	Rusty Cup Creek Rocky Creek	38.0	0513010701
TNR051285	Sequatchie Handle Works	A	Owens Branch	10.5	0513010701
TNR053271	APAC McMinnville Plant	D	Barren Fork	10.0	0513010701
TNR053365	Byars Service Center	P	Town Creek	10.0	0513010701
TNR053713	Sequatchie Handle Works	A	Piney Creek	5.78	0513010701
TNR050009	Dezurik Corporation	AA	Barren Fork	16.9	0513010702
TNR050158	Metal Products Company	AA		6.0	0513010702
TNR050195	Burroughs-Ross-Colville	A	Barren Fork	44.7	0513010702
TNR050227	Cumberland Lumber	A	Barren Fork	81.5	0513010702
TNR050423	Carrier Corporation	AB	Unnamed Trib to Barren Fork	51.0	0513010702
TNR050501	A.O. Smith Electrical	AC	Collins River	15.0	0513010702
TNR050690	McMinnville Manufacturing	A	Barren Fork	39.0	0513010702
TNR050759	Powermatic Main Plant	AB	Unnamed Trib to Barren Fork	18.0	0513010702
TNR051146	Turner Auto Salvage	M, K	Wet Weather Conveyance to Willow Branch to Barren Fork	17.0	0513010702
TNR053002	Yorozu Automotive	AA	Garner Branch	23.5	0513010702
TNR053210	Bridgestone/Firestone	Y	Crowfoot Branch Henegar Branch	350.0	0513010702
TNR054005	Southern Manufacturing	AA	Harvest Farm Lake	5.6	0513010702
TNR054292	Helton Incorporated	C	Metro Storm Sewer	0.5	0513010702
TNR054327	Metal Products Group	AA	Pepper Creek Barren Fork	1.1	0513010702
TNR050225	S. Central Iron and Metal	N	Hickory Creek	14.0	0513010703
TNR050097	Plateau Express	N	Bybee Creek	3.0	0513010704
TNR050487	Sunbeam Products	Y, AB	Unnamed Trib to Collins River	5.0	0513010704
TNR053849	Ames True Temper	AA, AB	Collins River	9.0	0513010704

Table A4-7. Active Permitted TMSP Facilities in the Collins River Watershed. Area, acres of property associated with industrial activity, Sector details may be found in Table A4-8.

SECTOR	TMSP SECTOR NAME
A	Timber Products Facilities
AA	Facilities That Manufacture Metal Products including Jewelry, Silverware and Plated Ware
AB	Facilities That Manufacture Transportation Equipment, Industrial or Commercial Machinery
AC	Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Goods
AD	Facilities That Are Not Covered Under Sectors A Thru AC (Monitoring Required)
AE	Facilities That Are Not Covered Under Sectors A Thru AC (Monitoring Not Required)
B	Paper and Allied Products Manufacturing Facilities
C	Chemical and Allied Products Manufacturing Facilities
D	Asphalt Paving, Roofing Materials, and Lubricant Manufacturing Facilities
E	Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities
F	Primary Metals Facilities
G	Metal Mines (Ore Mining and Dressing) (RESERVED)
H	Inactive Coal Mines and Inactive Coal Mining-Related Facilities
I	Oil or Gas Extraction Facilities
J	Construction Sand and Gravel Mining and Processing and Dimension Stone Mining and Quarrying Facilities
K	Hazardous Waste Treatment Storage or Disposal Facilities
L	Landfills and Land Application Sites
M	Automobile Salvage Yards
N	Scrap Recycling and Waste and Recycling Facilities
O	Steam Electric Power Generating Facilities
P	Vehicle Maintenance or Equipment Cleaning areas at Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and Terminals, the United States Postal Service, or Railroad Transportation Facilities
Q	Vehicle Maintenance Areas and Equipment Cleaning Areas of Water Transportation Facilities
R	Ship or Boat Building and Repair Yards
S	Vehicle Maintenance Areas, Equipment Cleaning Areas or From Airport Deicing Operations located at Air Transportation Facilities
T	Wastewater Treatment Works
U	Food and Kindred Products Facilities
V	Textile Mills, Apparel and other Fabric Product Manufacturing Facilities
W	Furniture and Fixture Manufacturing Facilities
X	Printing and Platemaking Facilities
Y	Rubber and Miscellaneous Plastic Product Manufacturing Facilities
Z	Leather Tanning and Finishing Facilities

Table A4-8. TMSP Sectors and Descriptions.

LOG NUMBER	COUNTY	DESCRIPTION	WATERBODY	HUC-10
97.416	Grundy	Bridge Construction	Pepper Hollow Branch	0513010701
98.026	Cannon	Bridge Replacement	Shanborne Branch	0513010701
98.419	Warren	Impoundment	Powder Mill Branch	0513010701
91.210	Warren	Gravel Dredging	North Fork Barren Fork	0513010702
92.308	Warren	Gravel Dredging	North Fork Barren Fork	0513010702
98.144	Warren	Debris Removal	Dog Branch	0513010702
9810.022	Cannon	Gravel Dredging	Dukes Creek	0513010702
87.001A	Warren	Gravel Dredging	Hickory Grove Branch	0513010704
87.001B	Warren	Gravel Dredging	Charles Creek	0513010704
89.001	Warren	Gravel Dredging	Charles Creek	0513010704
89.002	Warren	Gravel Dredging	Charles Creek	0513010704
90.089	Warren	Gravel Dredging	Mountain Creek	0513010704
90.90	Warren	Gravel Dredging	Collins River	0513010704
91.205	Warren	Gravel Dredging	Mountain Creek	0513010704
91.206	Warren	Gravel Dredging	Charles Creek	0513010704
91.207A	Warren	Gravel Dredging	Mountain Creek	0513010704
91.207B	Warren	Gravel Dredging	Mountain Creek	0513010704
91.209	Warren	Gravel Dredging	Collins River	0513010704
91.211	Warren	Gravel Dredging	Mountain Creek	0513010704
91.212	Warren	Gravel Dredging	Collins River	0513010704
92.309	Warren	Gravel Dredging	Charles Creek	0513010704
93.053	Warren	Gravel Dredging	Charles Creek	0513010704
93.103	Warren	Gravel Dredging	Charles Creek	0513010704
93.576A	Warren	Gravel Dredging	Charles Creek	0513010704
93.576B	Warren	Gravel Dredging	Charles Creek	0513010704
93.576C	Warren	Gravel Dredging	Charles Creek	0513010704
93.793	Warren	Gravel Dredging	Mountain Creek	0513010704
94.346	Warren	Gravel Dredging	Charles Creek	0513010704
96.242	Warren	Debris Removal	Charles Creek	0513010704
96.849	Warren	Gravel Dredging	Collins River	0513010704
9810.234	Cannon	Road Crossing	Mountain Creek	0513010704
99.438A	Warren	Gravel Dredging	Charles Creek	0513010704
99.438B	Warren	Gravel Dredging	Mountain Creek	0513010704

Table A4-9. Individual ARAP Permits Issued January 1994 Through June 2000 in Collins River Watershed.